

REMARKS

This is a full and timely response to the outstanding FINAL Office Action mailed July 19, 2007. The Examiner is thanked for the thorough examination of the present application. Upon entry of this response, claims 1-12 are pending in the present application. The drawings are objected to under 37 CFR 1.83(a). Claims 1-12 are rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1-12 are also rejected under 35 U.S.C. §102(b) as allegedly being anticipated by *Len nous et al.* (U.S. Pub. No. 2001/0033196, hereinafter "*Len nous*"). Applicants respectfully request consideration of the following remarks contained herein. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

I. Response to Drawing Objections

On page 2 of the Office Action, the drawings are objected to under 37 CFR 1.83(a). Specifically, the Office Action asserts that the drawings must show every feature of the invention specified in the claims. Applicants respectfully traverse the objections to the drawings for at least the reason that 37 CFR §1.81 states (emphasis added): "[t]he applicant for a patent is required to furnish a drawing of his or her invention where necessary for the understanding of the subject matter sought to be patented." Applicants respectfully submit that 37 CFR §1.83 must be read in conjunction with 37 CFR §1.81. Furthermore, Applicants note that numerous patents are issued without any drawings.

Notwithstanding, Applicants have amended claims 1-12 and submit that the necessary claimed features are supported by the drawings. As such, the objections to the drawings are rendered moot. However, should the Examiner later assert that the Examiner is unable to find the features in the drawings, Applicants submit that drawings of these features are not needed for understanding of the claimed subject matter. For the reasons set forth above, no drawing amendments, or new drawings, are believed to be required in response to the raised objections. Accordingly, Applicants respectfully request that the objections to the drawings be withdrawn.

II. Response to Claim Rejections Under 35 U.S.C. § 112

Claims 1-12 are rejected under 35 U.S.C. §112, second paragraph as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Specifically, the Office Action asserts the following:

Claims 1-12 claim a semiconductor and logic. These claims claim an apparatus but the apparatus claims do not claim any structure. There are no components of the apparatus cited to define the claims. The power density spectral mask and a plurality of break points are not components of an apparatus.

As indicated above, Applicants have amended claims 1-12 to now recite the following:

An asynchronous digital subscriber line (ADSL) system comprising:

a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask for spectral shaping of . . .

Applicants submit that no new matter is added as the amendments are fully supported in the specification. Accordingly, Applicants respectfully submit that the amendments render the §112 rejection moot and request that the rejection be withdrawn.

III. Response to Claim Rejections Under 35 U.S.C. § 102

It is axiomatic that "[a]nticipation requires the disclosure in a single prior art reference of each element of the claim under consideration." *W. L. Gore & Associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983). Therefore, every claimed feature of the claimed invention must be represented in the applied reference to constitute a proper rejection under 35 U.S.C. § 102.

Claims 1-12 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by *Len nous*. In particular, the Office Action asserts that "*Len nous discloses a monolithic semiconductor substrate comprising an active state variable filter (paragraph 0018). The filter is programmed with digital values to achieve a desired filter characteristic (paragraph 0018). Therefore, the semiconductor and logic will comprise a plurality of stored break points. Any break points that are desired can be stored.*" (Office Action, page 4).

Len nous is directed to a state variable filter, which includes a programmable variable resistor. The text cited by the Office Action is reproduced below (emphasis added):

[0018] An active state variable filter is presented including several programmable variable resistors. Each programmable variable resistor is coupled to receive a digital value and configured to provide an electrical resistance corresponding to the digital value between a pair of terminals. The programmable variable resistors are programmed with digital values to achieve desired filter

characteristics. The state variable filter including programmable variable resistors may be formed upon a monolithic semiconductor substrate.

(Paragraph 18). While *Len nous* teaches of an active state variable filter which includes several programmable variable resistors, *Len nous* fails to teach each and every element recited in claims 1-12. Applicants note that while claims 1-12 are discussed together below, each claim recites different features and as such, the claim limitations should not be treated as being coterminous.

Claims 1-12 recite (in part) the following (emphasis added):

**An asynchronous digital subscriber line (ADSL) system comprising:
a central office (CO) operator configured to perform
spectrum management, wherein the CO operator is further
configured to provide a power spectral density (PSD) mask for
spectral shaping of . . .**

Applicants submit that the *Len nous* reference, which relates to an entirely different field than the claimed embodiments, fails to teach the features emphasized above.

Applicants amended claims 1-12 to clarify the claimed embodiments and submit that no new matter is added. *Len nous* fails to disclose an "asynchronous digital subscriber line (ADSL) system" and "a central office (CO) operator configured to perform spectrum management, wherein the CO operator is further configured to provide a power spectral density (PSD) mask . . . "

Accordingly, Applicants respectfully submit that independent claims 1-12 patently defines over *Len nous* for at least the reason that *Len nous* fails to disclose, teach or suggest the highlighted features in claims 1-12.

CONCLUSION

Applicants respectfully submit that all pending claims are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephone conference would expedite the examination of this matter, the Examiner is invited to call the undersigned attorney at (770) 933-9500.

No fee is believed to be due in connection with this amendment and response to Office Action. If, however, any fee is believed to be due, you are hereby authorized to charge any such fee Conexant's deposit account No. 50-0835.

Respectfully submitted,

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